



MORNING BRIEFING

March 1, 2018

Phones & Homes

See the [collection](#) of the individual charts linked below.

(1) Ready or not: 5G is coming fast. (2) The running of the telecom bulls in Barcelona. (3) Phone service for the IoT. (4) Billions of dollars of new telco infrastructure spending. (5) Washington wants to help. (6) A major facelift coming for S&P Telecom sector. (7) Disappointing housing stats reflect bad weather in Northeast and supply shortage. (8) Toll's happy tale.

Telecom: Speed Demons. The S&P 500 Telecommunications Services sector may be tiny relative to the other sectors in the S&P 500, but the rollout of 5G makes it an area worth watching.

News about 5G developments came fast and furiously during the Mobile World Congress in Barcelona this week. The optimism about this futuristic wireless service came just as Gartner reported that global sales of smartphones declined by 5.6% in Q4 y/y, making it the first y/y decline in sales since the segment began to be tracked in 2004, a 2/22 *FT* [article](#) reported. Jackie offered to take a look at 5G and how it may affect the Telecom sector, even though I didn't offer to fly her to Barcelona:

(1) *What is 5G?* 5G will be a wireless system that offers faster speeds, lower latency (the time it takes the network to recognize your request for data and to start sending you the data), and longer battery life. The system will have enough capacity to handle communication among the billions of devices that are expected to communicate in the near future as the Internet of Things goes from theory into practice.

Current 4G networks have peak download speeds of one gigabit per second. With 5G networks, the speed increases to 10 gigabits. In 4G networks, latency is around 50 milliseconds, a delay that's reduced to one millisecond in 5G. The 5G system will have greater capacity and "be able to assign bandwidth depending on the needs of the application and the user," a 3/13/15 Recode [article](#) explained.

(2) *What's it used for?* A 5G network will make everything faster. So an eight-gigabyte HD movie could be downloaded in six seconds in 5G, instead of the seven minutes it would take in 4G or the hour plus it would require on a 3G network, the Recode article stated.

5G networks will make autonomous cars safer as cars will receive data about their surroundings from sensors in the pavement or in other cars to avoid an accident. As a side note, autonomous vehicles got one step closer to reality this week when California's Department of Motor Vehicles said it will provide permits that allow the testing of autonomous cars without a safety driver at the wheel starting April 2. The car will need to be in communication with a remote operator who can take control of the vehicle if necessary.

Other potential 5G uses: Doctors could conduct surgery remotely thanks to 5G's low latency. And virtual reality and gaming become faster and more life-like with the system's faster speeds.

(3) *The rollout race is on.* A number of carriers are rolling out what could be considered stage one of 5G while standards are still being agreed upon. Some are offering "fixed-line 5G," where the service goes to a wireless antenna near a home and the "last mile" to the home occurs wirelessly instead of via a

cable. Ultimately, everyone's cell phones will be able to tap into the 5G network.

5G technology "will need millions of new cellular radio antennae that have yet to be installed. That gives an edge to landline companies with access to telephone poles, though it will take time even then for them to rig new radios along city streets," a 2/24 *WSJ* [article](#) reported.

For right now, fixed-line 5G will give telecom providers an edge when they compete with cable and satellite providers. Verizon will roll out "fixed-line" 5G in Sacramento in the second half of this year using Samsung equipment. The company conducted 5G trials in 11 markets across the US last year. AT&T is using Ericsson and Intel equipment to test fixed-line 5G and may roll it out to 12 markets by year-end. T-Mobile announced plans to launch 5G service in 30 major cities in Q4, and Sprint is targeting service by the first half of next year.

Facebook initiated the Telecom Infra Project to push along innovation in 5G networks by encouraging many of the industry's largest telecom and equipment providers to cooperate and use open-source software in their systems. At Mobile World, "Nokia said it would collaborate with Facebook to deliver high-capacity wireless signals in dense urban areas where fiber optic cabling is not practical to deliver to each household. The technology can be strung from street lights. The service relies on unlicensed, high-frequency 60 gigahertz airwaves which have been freed up in countries including United States, United Kingdom, Germany, China, South Korea, Japan, Facebook has previously said," a 2/25 Reuters [article](#) reported.

All of this development will be costly upfront, but hopefully will pay off in the long run. A Barclays estimate put the price tag for the US rollout of 5G at \$300 billion. But the network will give service providers a \$600 billion revenue opportunity, as customers use wireless communications more as the Internet of Things and the industrial Internet takes off, [said](#) Ericsson's CEO Borje Ekholm at Mobile World.

(4) *Government doing its part.* FCC Chairman Ajit Pai said in a speech to Mobile World that "he would aim to auction two chunks of the airwaves for next-generation wireless service this fall. ... To carry out his plan, Mr. Pai said, the agency needs quick action from Congress to remove a bureaucratic barrier that could hinder the planned fall auctions. He has said big banks are no longer willing to hold pre-auction payments from carriers because of the banks' capitalization and collateralization requirements. So the FCC is seeking a change from Congress to allow the Treasury Department to hold the prepayments. ... And Mr. Pai said the FCC in coming months would propose steps to make more mid-band spectrum available for commercial use and would move forward by year's end on new unlicensed uses in other bands," explained a 2/26 *WSJ* [article](#).

A recently leaked White House memo suggested the government could become more involved with the rollout of 5G to help the US compete with the threat from China and other nations. Pai criticized the memo's recommendations, indicating that the idea of privatization of 5G is DOA.

(5) *Telecom fades into the sunset.* Since we're discussing all things telecom, it seemed timely to revisit the shakeup that will hit the sector this fall. The S&P 500 Telecommunications Services sector will be renamed the "S&P 500 Communication Services Sector" after the close of business on September 28, and it will get some fancy new constituents from the S&P 500 Tech and Consumer Discretionary sectors.

The new Communications sector will probably include current Telecom members AT&T, CenturyLink, and Verizon. It will likely add Walt Disney, Netflix, and Comcast, each of which now resides in the Consumer Discretionary sector. The sector is also expected to include Facebook and Alphabet from the

Tech sector.

The S&P 500 Telecom Services sector, which kicks in only 1.9% of the S&P 500's market capitalization and 3.0% of earnings, has fallen 8.4% y/y, making it the worst-performing sector in the S&P 500 ([Fig. 1](#)). It's expected to have 15.1% earnings growth in 2018 thanks to the tax cuts. However, its growth rate falls back to 1.0% in 2019 when those cuts are annulled ([Fig. 2](#)).

Morgan Stanley estimates the new Communications sector will represent 13.2% of the S&P 500's market capitalization, Tech will be 18.0% (down from 25.9%), and Consumer Discretionary will shrink to 9.9% (down from 13.4%), a 2/27 MarketWatch [article](#) reported. Although the changes don't take place until after September 28, it's never too early to plan.

Housing: Still Home Sweet Home? Data out of the housing industry hasn't been comforting recently, with sales of both new and existing homes falling in December and January. We've long been bullish on the housing industry, and given the economy's strong fundamentals right now, it's hard to see the industry's strong run coming to an end. Let's take a look at what has investors spooked:

(1) *Fewer new homes selling.* The number of [new homes](#) sold in January fell 7.8% m/m to a five-month low of 593,000 units (saar). January sales were also 1.0% lower y/y. Punk sales last month follow a Grinch-y December, when sales fell 7.6% m/m.

Were that not bad enough, new home inventories rose in January. There were 301,000 homes on the market, the most since March 2009. As a result, it would take 6.1 months to clear the inventory at the current sales pace, up from 4.9 months in November ([Fig. 3](#)).

There are three reasons to stay calm: December's and January's weak results followed November, when sales came in at a cyclical high of 696,000 units, Debbie points out. We hate to fall back on a weather excuse, but it was indeed snowy in the Northeast during January, and that's not conducive to home sales. New home sales dropped by 33.3% in the Northeast and 14.2% in the South, while increasing 15.4% in the Midwest and 1.0% in the West. Finally, new home sales data are volatile, and January's 7.8% sales decline has a 19.0% margin of error on both the upside and downside.

(2) *Fewer existing homes selling.* [Existing home](#) sales—which includes single-family homes, coops, and condos—also fell in January by 3.2% m/m and by 4.8% y/y. The decline follows a 2.8% drop in December. Likewise, pending home sales—where contracts have been signed but the sale has yet to occur—fell 4.7% in January m/m and fell 3.8% y/y.

Geographically, the dip in existing home sales was broad based, affecting all four regions of the country: Northeast (-1.4%), Midwest (-6.0), South (-1.3), and West (-5.0). The drop in sales was concentrated at the low end of the market, with sales of homes worth under \$100,000 falling 13.2%, and sales of homes worth \$100,000 to \$250,000 down 2.3%. The sale of more expensive homes rose anywhere from 6.7% to 11.6%.

Here too, there is cause for calm: Low inventory levels may be preventing higher sales volumes. The number of existing single-family homes for sale at the end of January was at 1.36mu, 9.9% below year-ago levels, Debbie reports. As a result, unsold inventory was at a 3.4 months' supply, near December's record low of 3.1 months ([Fig. 4](#)).

"The utter lack of sufficient housing supply and its influence on higher home prices muted overall sales activity in much of the U.S. last month," said Lawrence Yun, the National Association of Realtors' chief economist. "While the good news is that Realtors® in most areas are saying buyer traffic is even

stronger than the beginning of last year, sales failed to follow course and far lagged last January's pace. It's very clear that too many markets right now are becoming less affordable and desperately need more new listings to calm the speedy price growth." The median existing home price was \$240,500 in January, up 5.8% y/y.

(3) *Hint of improvement?* Mortgage applications are the most timely data set, but also the most volatile. With that in mind, mortgage applications for purchase for the week ended 2/23 increased 3.6% y/y, the Mortgage Bankers Association [reported](#) yesterday. The average rate on a conforming 30-year fixed mortgage was 4.64%, unchanged from the prior week and up slightly from 4.45% a year ago ([Fig. 5](#)).

(4) *Spooked investors.* After a banner 2017, investors have been fleeing homebuilding stocks. The S&P 500 Homebuilding industry was the best-performing industry in 2017, with a 71.8% gain. However, so far this year, the industry's return has gone from best to worst. It's down 10.5% through Tuesday's close, while the S&P 500 is up 4.0% ([Fig. 6](#)).

Analysts remain optimistic, however, with expected revenue growth of 25.8% and earnings growth of 31.8% for the next 12 months. The gain is undoubtedly helped by the reduction in taxes this year, but solid sales are also forecasted. The industry's forward P/E is 10.4, not as high as it was coming out of the recession, when earnings were miniscule, and not as low as prior to the recession, when home sales and earnings were booming.

(5) *Toll's optimistic.* Toll Brothers builds high-end homes and condos around the country, and its executives sounded optimistic about the housing market and the company's fortunes on the company's fiscal Q1 conference [call](#).

"The new home industry appears to be building momentum with the national homeownership rate rising over the past year. Wages are increasing. Home equity is building. Consumer confidence is strong. The economy is improving, and demand for housing is accelerating," said Executive Chairman Robert Toll, according to the transcript. "Meanwhile, the supply of new homes is in short supply, as production lags demand in many markets. These trends indicate a positive landscape for the new home market and particularly for Toll Brothers in the coming years."

In fiscal Q1, Toll reported earnings excluding the tax reform benefit of 63 cents a share, up from 42 cents a year ago and a penny above analysts' consensus estimate. Revenue rose 27.7% in Q1, while orders rose 19.7% to 1,822 homes.

A drag on results was the price of lumber, which rose by about \$2,000 per house in the quarter. Conversely, Toll's results were helped by higher home prices and lower taxes. The company plans to continue raising the asking price of its new homes and sees its effective tax rate dropping to 26%-27% in fiscal 2019 and beyond, down from the estimate of 37% in 2018 before tax reform.

So far, Toll hasn't seen any drop in demand due to the reduction in the deduction for state and local taxes (SALT) or the reduction in mortgage interest deductions. The two tax changes "are not being mentioned by our buyers even in the high tax states like California, New Jersey and New York," said CEO Douglas Yearley. "Recall that the tax reform provisions were known in early-to-mid December, but our buyers didn't seem to blink." We'll be watching to make sure they don't.

CALENDARS

US. Thurs: Personal Income & Consumption 0.3%/0.2%, Headline & Core PCED 1.7%/1.5% y/y, Total & Domestic Motor Vehicle Sales 17.1mu/13.0mu, Construction Spending 0.3%, Jobless Claims 230k,

ISM & Markit M-PMIs 58,6/55.7, Weekly Consumer Comfort Index, EIA Natural Gas Report, Powell, Dudley. **Fri:** Consumer Sentiment Index 99.5, Baker-Hughes Rig Count. (*Wall Street Journal* estimates)

Global. Thurs: Eurozone Unemployment Rate 8.6%, Eurozone, Germany, France, and Italy M-PMIs 58.5/60.3/na/58.0, Italy GDP 1.7% y/y, UK M-PMI 55.0, Japan Consumer Confidence 44.8, Japan Jobless Rate 2.8%, Japan Household Spending -0.4% y/y, Japan M-PMI, China Caixin M-PMI 51.3. **Fri:** Germany Retail Sales 0.7% m/m/3.3% y/y, Italy GDP 0.3% q/q/1.6% y/y, Canada GDP 2.4% q/q(saar)/3.4% y/y, Carney. (DailyFX estimates)

STRATEGY INDICATORS

Stock Market Sentiment Indicators ([link](#)): Our Bull/Bear Ratio (BBR) barely budged this week from last week's five-month low, ticking up from 3.32 to 3.34; it was above 5.00 the last three weeks of January. Six weeks ago, the BBR was at 5.25, which was the highest since early April 1986. Bullish sentiment has plummeted 17.9ppts the past four weeks to 48.1% (lowest since mid-September) after 16 weeks at 60.0% or above; it was at 66.0% four weeks ago, which was the most bulls since early April 1986. Most of the bulls fled to the correction camp, which jumped 16.1ppts the past four weeks to 37.5%—its highest reading since May 2016. Bearish sentiment has fluctuated between 14.4% and 14.6% the past three weeks, up from 12.6% four weeks ago—which was the fewest bears since early April 1986. The AAll Ratio dropped from 69.4% to 66.2% last week, as bullish sentiment fell from 48.5% to 44.7% and bearish sentiment rose from 21.4% to 22.8%.

S&P 500 TCJA Earnings Leaders & Laggards ([link](#)): The 2018 earnings forecast for the S&P 500 has surged 7.8% in the ten weeks since the TCJA was signed into law on December 22. This outstanding performance has no comparison over the years since consensus earnings forecasts were first derived in 1978. The top sector gainers since the TCJA was passed: Energy (24.3%), Telecom (17.0), Financials (11.5), and Industrials (9.4). Real Estate is the sole decliner, with a drop of 2.3%. Also underperforming the S&P 500 are Utilities (0.8), Consumer Staples (4.0), Tech (4.9), Health Care (5.3), Materials (6.4), and Consumer Discretionary (7.7). With the Q4 earnings season over 90% complete, the strong upward pace of revisions is already showing signs of winding down. Higher oil prices, a.k.a. "animal spirits," have contributed heavily to the improvement in Energy's earnings. The remaining leading sectors are well ahead in part due to higher exposure to the US tax system and because their Q4 earnings seasons are more complete than the laggards, so analysts have already adjusted forecasts based on their companies' post-TCJA earnings guidance. We also expect that the change in the lagging sectors' 2018 estimates will continue to trail that of the S&P 500.

S&P 500 Earnings, Revenues & Valuation ([link](#)): Last week saw S&P 500 consensus annual and forward revenues and earnings rise to new record highs. However, the 2018 and forward profit margin forecasts were steady for a third straight week (2018 at 11.8%, 2019 at 12.5%, and forward at 11.9%). This suggests that the positive impact of the TCJA on margins has been fully recognized. Prior to the passage of the TCJA, the profit margin had been steady at 11.1% since October, which was the highest since September 2015 and up from a 24-month low of 10.4% in March 2016. Forward revenue growth of 6.3% for the S&P 500 was unchanged w/w at its highest level since September 2011. That reading compares to a cyclical low of 2.7% in February 2016. Forward earnings growth rose 0.1ppt w/w to 16.9% from 16.8%, and is the highest since October 2010. That's up a whopping 7.8ppts from 11.1% prior to the passage of the TCJA, and 14.1ppts from the cyclical low of 4.8% in February 2016. Energy, Materials, and Real Estate had the biggest w/w improvement in forward earnings growth; Energy rose 0.7ppt to 55.3%, Materials gained 0.3ppt to 19.8%, and Real Estate rose 0.3ppt to -11.0%. Energy's contribution to forward growth peaked at the start of 2017. Looking at last week's results, the S&P 500 ex-Energy's forward growth was 5.5% for revenues and 15.4% for earnings. However, the S&P 500 ex-Energy forward profit margin rose 0.1ppt to a record high of 12.6%, which is up from 11.7% before the

TCJA. The forward P/E was steady at 17.1, which compares to a 16-year high of 18.6 at the market's peak in late January and a 15-month low of 14.9 in January 2016. The S&P 500 price-to-sales ratio was unchanged at 2.04, which compares to late January's record high of 2.16.

S&P 500 Sectors Earnings, Revenues & Valuation ([link](#)): Consensus forward earnings forecasts rose last week for 7/11 sectors, and forward revenues rose w/w for 8/11 sectors. Real Estate and Telecom had both measures decline w/w. Forward revenues and earnings are at or around record highs for 5/11 sectors: Consumer Discretionary, Consumer Staples, Health Care, Industrials, and Tech. Energy's forward revenues and earnings appear to be back on uptrends after stalling during 2016-2017, and earnings have nearly tripled from their 18-year low in April 2016. Forward P/S and P/E ratios are down from their highs for all sectors. However, Energy's valuations remain elevated; its P/S ratio of 1.16 compares to a record high of 1.56 in May 2016, and its P/E of 18.8 is down from a record high of 57.5 then. Higher margins are expected y/y in 2018 for all but Real Estate, but the sector's earnings includes gains from property sales and typically improves as the year progresses. The post-TCJA improvements in forward profit margins are waning now, as Materials was the only sector to rise w/w. Here's how the sectors rank based on their current forward profit margin forecasts: Information Technology (22.2%), Financials (18.5), Real Estate (16.6), Telecom (13.2), S&P 500 (11.9), Utilities (11.8), Materials (11.3), Health Care (11.1), Industrials (10.0), Consumer Discretionary (8.0), Consumer Staples (7.1), and Energy (6.2).

S&P 500 Q4 Earnings Season Monitor ([link](#)): With nearly 94% of S&P 500 companies finished reporting earnings and revenues for Q4-2017, their revenue and earnings surprise metrics are mostly better compared to the same point during the Q3 earnings season. Q4-2017 will mark the sixth straight quarter of positive y/y earnings growth and the seventh straight quarter of positive y/y revenue growth, as well as the quarter with the highest y/y revenue and earnings growth since Q3-2011. Of the 469 companies in the S&P 500 that have reported through mid-day Wednesday, 76% exceeded industry analysts' earnings estimates by an average of 4.8%; they have averaged a y/y earnings gain of an impressive 16.7%. At the same point during the Q3-2017 reporting period, a lower percentage of companies (73%) in the S&P 500 had beaten consensus earnings estimates by a higher 5.5%, and earnings were up a lower 8.1% y/y. On the revenue side, an impressive 77% beat sales estimates so far, with results coming in 1.3% above forecast and a whopping 8.1% higher than a year earlier. At this point in the Q3 season, a lower 67% had exceeded revenue forecasts by a similar 1.3%, and sales had risen by a lower 5.9% y/y. Q4 earnings results are higher y/y for 78% of companies vs a lower 70% at the same point in Q3, and revenues are higher y/y for an astounding 87% during Q4 vs a lower 79% a quarter ago. The percentages of companies growing y/y are the highest since we first began tracking them during Q1-2009.

US ECONOMIC INDICATORS

GDP ([link](#)): Real GDP growth last quarter was little changed from the initial estimate (to 2.5% from 2.6%, saar), slowing from gains of 3.2% and 3.1% the prior two quarters; those prior quarters represented the first time in three years that growth posted two consecutive quarters of 3.0%-plus growth. Real consumer spending accelerated by an unrevised 3.8% (saar) last quarter—the strongest rate in six quarters—led by a 7.5% jump in goods consumption, slightly below the initial 8.2% gain; services spending rose 2.1%, slightly faster than the 1.8% preliminary. Within goods consumption, spending on durable goods (to 13.8% from 14.2%) was still the best since Q3-2009, while nondurable goods outlays (4.3 from 5.2) was the highest since Q2-2016. Real nonresidential fixed investment (6.6 from 6.8) was little changed from the initial estimate, driven by its second straight double-digit gain (11.8 from 11.4) in equipment spending; investment in intellectual property properties (2.4 from 4.5) was roughly half the initial estimate, while structures (2.5 from 1.4) was nearly double preliminary guesstimates. Residential investment (13.0 from 11.6) was also stronger than initially thought, reversing

declines the prior two quarters. Real government spending (2.9 from 3.0) accelerated at a 10-quarter high, with both federal (3.2 from 3.5) and state & local (2.7 from 2.6) government spending heading higher. Growth in both exports (7.1 from 6.9) and imports (14.0 from 13.9) were little changed from the preliminary report—with the latter double the pace of the former, subtracting from GDP growth. Inventory investment (\$8.0 billion from \$9.2 billion, saar) was weaker than first reported, down from \$38.5 billion during Q3.

Contributions to GDP Growth ([link](#)): Real consumer spending once again was the number-one contributor to real GDP last quarter, while trade and inventory investment were drags on growth. Some details: (1) Real consumer spending accounted for 2.58ppts of real GDP growth during Q4 as goods consumption added 1.61ppts—durable (0.99ppt) and nondurable (0.62)—while services contributed 0.97ppt. (2) Nonresidential fixed investment (0.82) was the number-two contributor to growth, driven by spending on equipment (0.64); contributions from intellectual property products (0.10) and structures (0.07) were more modest. (3) Real government spending (0.49) rounded out the top three, with state & local (0.28) and federal (0.21) government spending complementing one another. (4) Residential investment (0.47) ended 2017 as it began, contributing positively to growth after subtracting from growth the prior two quarters. (5) Trade (-1.13) was the biggest negative contributor to growth during Q4, as the negative contribution from imports (-1.97) more than offset the positive one from exports (0.84). (6) Inventory investment (-0.70) also subtracted from growth last quarter—all nonfarm related (-0.70).

Pending Home Sales ([link](#)): The Pending Home Sales Index—measuring sales contracts for existing-home purchases—fell in January for the first time in four months, sinking 4.7% to 104.6, to the lowest level in over three years. NAR's Chief Economist Lawrence Yun noted, "The economy is in great shape, most local job markets are very strong and incomes are slowly rising, but there's little doubt last month's retreat in contract signings occurred because of woefully low supply levels and the sudden increase in mortgage rates." Regionally, sales were below year-ago levels in all regions: Northeast (-12.1% y/y), Midwest (-4.1), West (-2.5), and the South (-1.1). The number of available listings at the end of January was at an all-time low for the month, a whopping 9.5% below a year ago. Yun believes that several conditions must fall into place to alleviate the alarmingly low supply levels that are slowing sales: greater new home construction, approaching its historical annual average of 1.5 million starts, institutional investors beginning to unload their portfolio of single-family properties back onto the market, and more hesitant homeowners deciding to sell.

GLOBAL ECONOMIC INDICATORS

Eurozone CPI Flash Estimate ([link](#)): February's CPI rate is expected to slow to a 14-month low of 1.2% y/y, according to the flash estimate, slowing steadily from November's 1.5%. So February's rate should remain below the ECB's goal of just under 2.0%. Looking at the main components, rates for energy (to 2.1% from 2.2% y/y) and food, alcohol, and tobacco (1.1 from 1.9) once again are expected to slow. Meanwhile, the rate for non-energy industrial goods (0.7 from 0.6) is expected to post its highest rate since January 2016; services inflation is expected to tick up to 0.3% from 0.2% the prior four months. The core rate—which excludes energy, food, alcohol, and tobacco—is expected to remain at 1.0%.

France GDP ([link](#)): The Eurozone's second-largest economy expanded 2.6% (saar) during Q4, up from 2.2% during Q3 and in line with the first two quarters of the year; it showed little growth during the last half of 2016. Growth in gross fixed capital investment accelerated 4.7% (saar) last quarter, its second best reading in two years, while household consumption (0.8%, saar) expanded at its slowest pace in over a year. Trade was a big boost to Q4 GDP as growth in exports (9.7) exceeded imports (1.1) by a wide margin, posting its best growth rate since mid-2013. Real government spending grew 1.2% (saar),

just over a percentage point below Q3's 2.3%. For calendar-year 2017, real GDP accelerated at a six-year high of 2.0%.

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